

React & AJAX example with useEffect, .env.local, routing w. params etc.

Contents

public/index.html (unchanged)	1
src/index.js (now could be slightly changed, or put Router to App.js)	1
src/App.js	2
src/components/CategoryRow.js	2
src/components/CategoryListItem.js	2
src/views/CategoryListView.js	3
src/views/CategoryDetailsView.js	4
.env.local --- add that in the root folder of the repo/project	5
src/ajax/dao.js	5

public/index.html (unchanged)

```
<body>
  <noscript>You need to enable JavaScript to run this app.</noscript>
  <div id="root"></div>
  <!--
    This HTML file is a template.
    If you open it directly in the browser, you will see an empty page.
  -->
</body>
```

src/index.js (now could be slightly changed, or put Router to App.js)

```
... not all code there important
import { BrowserRouter } from 'react-router-dom';
...

const root = ReactDOM.createRoot(document.getElementById('root'));

root.render(
  <React.StrictMode>
    <BrowserRouter>
      <App />
    </BrowserRouter>
  </React.StrictMode>
);
```

src/App.js

```
import { Routes, Route, NavLink } from 'react-router-dom';
import './App.css';
import CategoryListView from './views/CategoryListView';
import CategoryDetailsView from './views/CategoryDetailsView';

function App() {
  return (
    <div className="App">
      <nav>
        <span>Extra navbar at top: </span>
        <NavLink to="/category">Categories</NavLink>
      </nav>
      <Routes>
        <Route path="category" element={ <CategoryListView /> } />
        <Route path="/category/:categoryId" element={ <CategoryDetailsView /> } />
      </Routes>
    </div>
  );
}
export default App;
```

src/components/CategoryRow.js

```
import React from "react";

const CategoryRow = ({category}) => {
  return (<div>` ${category.id} : ${category.name}` </div>);
}

export default CategoryRow;
```

src/components/CategoryListItem.js

```
import React from "react";
import CategoryRow from "../components/CategoryRow";
import {Link} from "react-router-dom";

const CategoryListItem = ({category}) => {
  return (
    <Link to={` /category/${category.id}`} >
      <CategoryRow category={category} />
    </Link>
  );
}

export default CategoryListItem;
```

src/views/CategoryListView.js

```
import React, {useState, useEffect} from "react";

import CategoryListItem from "../components/CategoryListItem";
import dao from "../ajax/dao";

const CategoryListView = () => {
  const [categories, setCategories] = useState([]);

  useEffect(() => {
    // ...do something ONLY when component did mount
    // Notice: even if categories state change => not fired
    async function refreshCategories () {
      const data = await dao.fetchCategories();
      setCategories(data);
    }
    refreshCategories();

  },[]);

  useEffect(() => {
    // ...do something when 1. component did mount
    // 2. categories state changes
  },[categories]);

  return (
    <>
    <h3>Categories</h3>
    <div>
      {categories && categories.length>0 ?
        categories.map((item)=>
          <CategoryListItem    key={item.id}
                              id={item.id}
                              category={item} />
        ) : "no categories yet"
      }
    </div>
    </>
  );
}

export default CategoryListView;
```

src/views/CategoryDetailsView.js

```
import React, {useState, useEffect} from "react";
import {Link, useParams } from "react-router-dom";
import dao from "../ajax/dao";

const CategoryDetailsView = () => {
  const [category, setCategory] = useState({});
  const {categoryId} = useParams();

  useEffect(() => {
    async function getCategory () {
      const data = await dao.fetchOneCategoryById(categoryId);
      setCategory(data);
    }
    getCategory();
  },[]);

  return(
    <div>
      <h1>Details of a Category</h1>

      { category && category.id != undefined ?
        <dl>
          <dt>id: {category.id}</dt>
          <dd>name: {category.name}</dd>
          <dd>budget: {category.budgetLimit}</dd>
        </dl>
        : "Still downloading the category"
      }

      <nav>
        <Link to="/category">Back to list</Link>
      </nav>
    </div>

  );
}

export default CategoryDetailsView;
```

.env.local --- add that in the root folder of the repo/project

REACT_APP_BE_SERVER_BASE_URL=http://localhost:8777/api

src/ajax/dao.js

```
const baseUrl = process.env.REACT_APP_BE_SERVER_BASE_URL;
```

```
const fetchCategories = async () => {  
  const request = new Request(`${baseUrl}/category/all`, {  
    method: 'GET',  
  });
```

```
  
  const response = await fetch(request);  
  const data = await response.json();  
  return data;  
};
```

```
const fetchOneCategoryById = async (categoryId) => {  
  const request = new Request(`${baseUrl}/category/${categoryId}`, {  
    method: 'GET',  
  });
```

```
  
  const response = await fetch(request);  
  const data = await response.json();  
  
  const category = data && data.length>0 ? data[0] : null;  
  return category;  
};
```

```
export default {  
  fetchCategories,  
  fetchOneCategoryById,  
};
```